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     FILE 'HCAPLUS' ENTERED AT 16:24:38 ON 11 JUN 2009
L1          5651 S BETA GLUCAN
L2         71760 S SIDE CHAIN
L3        417223 S ANTIBODY OR IMMUNOGLOBULIN OR MONOCLONAL
L4        918897 S CANCER OR TUMOR OR NEOPLA?
L5             0 S L1 AND L2 AND L3 AND L4
L6             0 S L5 AND (PY<2004 OR AY<2004 OR PRY<2004)

     FILE 'STNGUIDE' ENTERED AT 16:24:47 ON 11 JUN 2009

     FILE 'HCAPLUS' ENTERED AT 16:25:13 ON 11 JUN 2009
L7            73 S L1 AND L3 AND L4
L8            34 S L7 AND (PY<2004 OR AY<2004 OR PRY<2004)
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=> file hcaplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       1.32       1.32

FILE 'HCAPLUS' ENTERED AT 16:24:38 ON 11 JUN 2009
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 11 Jun 2009  VOL 150 ISS 24
FILE LAST UPDATED: 10 Jun 2009  (20090610/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Feb 2009

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s beta glucan

       1615907 BETA
         17227 GLUCAN
L1        5651 BETA GLUCAN
                (BETA(W)GLUCAN)

=> s side chain

        725000 SIDE
        820378 CHAIN
L2       71760 SIDE CHAIN
                (SIDE(W)CHAIN)

=> s antibody or immunoglobulin or monoclonal

        349307 ANTIBODY
         33103 IMMUNOGLOBULIN
        162283 MONOCLONAL
L3      417223 ANTIBODY OR IMMUNOGLOBULIN OR MONOCLONAL

=> s cancer or tumor or neopla?

        408480 CANCER
        499913 TUMOR
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        597419 NEOPLA?
L4      918897 CANCER OR TUMOR OR NEOPLA?

=> s l1 and l2 and l3 and l4

L5           0 L1 AND L2 AND L3 AND L4

=> s l5 and (PY<2004 or AY<2004 or PRY<2004)

      24035581 PY<2004
       4800104 AY<2004
       4272810 PRY<2004
L6           0 L5 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> file stnguide

COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
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FULL ESTIMATED COST                                   2.85       4.17

FILE 'STNGUIDE' ENTERED AT 16:24:47 ON 11 JUN 2009
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jun  5, 2009 (20090605/UP).

=> file hcaplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   0.07       4.24

FILE 'HCAPLUS' ENTERED AT 16:25:13 ON 11 JUN 2009
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FILE COVERS 1907 - 11 Jun 2009  VOL 150 ISS 24
FILE LAST UPDATED: 10 Jun 2009  (20090610/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Feb 2009

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
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substance identification.

=> s l1 and l3 and l4

L7 73 L1 AND L3 AND L4

=> s l7 and (PY<2004 or AY<2004 or PRY<2004)

24035581 PY<2004
4800104 AY<2004
4272810 PRY<2004
L8 34 L7 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.85	7.09

FILE 'STNGUIDE' ENTERED AT 16:25:19 ON 11 JUN 2009

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jun 5, 2009 (20090605/UP).

=> d l8 1-34 ti
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L8 ANSWER 1 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI β Glucan as immune adjuvant for anti-cancer vaccine

L8 ANSWER 2 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Therapy-enhancing glucan

L8 ANSWER 3 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Treating autoimmune diseases and viral infection by inducing antigen presentation by tolerance inducing antigen presenting cells (APCs) using autoantigen peptides linked to APC antibodies

L8 ANSWER 4 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Methods and compositions for producing increased antigenic response using adenosine A1 receptor-activating agents

L8 ANSWER 5 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Autoantigen epitopes linked to antibodies for inducing antigen presentation by tolerance-inducing antigen presenting cells and for treating autoimmune diseases

L8 ANSWER 6 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Cancer therapy using β -glucan and monoclonal antibodies

L8 ANSWER 7 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Cancer therapy using whole glucan particles and antibodies

L8 ANSWER 8 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN

TI Immunomodulating activity of a β -glucan preparation, SCG, extracted from a culinary-medicinal mushroom, Sparassis crispa Wulf.:Fr. (aphyllophoromycetideae), and application to cancer patients

L8 ANSWER 9 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Use of beta-glucans against biological warfare weapons and pathogens including anthrax

L8 ANSWER 10 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI β -Glucan Functions as an Adjuvant for Monoclonal Antibody Immunotherapy by Recruiting Tumoricidal Granulocytes as Killer Cells

L8 ANSWER 11 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Immunostimulating efficacy of insoluble β-1,3-glucan from Agrobacterium sp. R259 KCTC 10197BP

L8 ANSWER 12 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Determination of the potential use of beta-glucan as an adjuvant for monoclonal antibody immunotherapy of cancer

L8 ANSWER 13 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Enhanced Cytokine Synthesis of Leukocytes by a β -Glucan Preparation, SCG, Extracted from a Medicinal Mushroom, Sparassis crispa

L8 ANSWER 14 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Macrophage receptor Dectin-1

L8 ANSWER 15 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Orally administered β-glucans enhance anti- tumor effects of monoclonal antibodies

L8 ANSWER 16 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Antitumor antibody-enhancing glucan

L8 ANSWER 17 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Oral (1→3),(1→4)-β-D-glucan synergizes with antiganglioside GD2 monoclonal antibody 3F8 in the therapy of neuroblastoma

L8 ANSWER 18 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Plants, polysaccharides, and the treatment and prevention of neoplasia

L8 ANSWER 19 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Clostridial neurotoxin targeted conjugates for inhibition of secretion from non-neuronal cells

L8 ANSWER 20 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Preparation of antibody against antitumor β -glucan in Grifola frondosa and its application

L8 ANSWER 21 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Immunopharmacological and immunotoxicological activities of a water-soluble (1 → 3)-β-D-glucan, CSBG from Candida spp

L8 ANSWER 22 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Failure in antitumor activity by overdose of an immunomodulating .

beta.-glucan preparation, sonifilan

L8 ANSWER 23 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Polymeric drugs based on conjugates of synthetic and natural macromolecules. II. Anti-cancer activity of antibody or (Fab')2-targeted conjugates and combined therapy with immunomodulators

L8 ANSWER 24 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Interactions of Penicillium marneffei with human leukocytes in vitro

L8 ANSWER 25 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Antigen-specific response of murine immune system toward a yeast . beta.-glucan preparation, zymosan

L8 ANSWER 26 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Activation of murine macrophages by grifolan

L8 ANSWER 27 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Cellular requirements for immunomodulatory effects caused by cell wall components of Paracoccidioides brasiliensis on antibody production

L8 ANSWER 28 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Preparation and specificity of antibodies to an anti-tumor . beta.-glucan, lentinan

L8 ANSWER 29 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Covalently bound β -glucan conjugates with bioactive agents for targeted delivery

L8 ANSWER 30 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Interrelation of structure and antitumor effects of fungal (1→3) β-D-glucans.

L8 ANSWER 31 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Pulmonary metastases neutralization and tumor rejection by in vivo administration of β glucan and bispecific antibody

L8 ANSWER 32 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Straw mushroom, fukurotake, Volvariella volvacea

L8 ANSWER 33 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Effect of lentinan and mannan on phagocytosis of fluorescent latex microbeads by mouse peritoneal macrophages: a flow cytometric study

L8 ANSWER 34 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
TI Antitumor and immunomodulating activities of a β - glucan obtained from liquid-cultured Grifola frondosa

=> d l8 1-34 abs bib
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L8 ANSWER 1 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB This invention discloses a composition for enhancing the protective immunity in a subject, comprising an effective amount of a β -

glucan and a vaccine, wherein the β -glucan enhances the immune response of the vaccine against cancer (or infectious agents). The infectious agents can be viruses, fungi, bacteria, or parasites. In one embodiment, the β -glucan is derived from yeast and comprises side chains attached to a β-(1,3) backbone. In another embodiment, the vaccine comprises an antibody and whole tumor cells. The invention also provides a method of enhancing protective immunity using said composition comprising the steps of (1) administering to the subject a vaccine; and (2) administering to the subject β -glucan, wherein said β -glucan has a β-(1,3) backbone and optionally β-(1,3) and/or β-(1,6) side chains, and wherein said β -glucan enhances the immune response to the anti-cancer vaccine. In another embodiment, the cancer vaccine comprises an antibody and ≥1 components selected from the group consisting of whole tumor cells, tumor cell lysates, tumor cell-derived RNAs, proteins, peptides, carbohydrates, lipids, DNA sequences, and gene-modified tumor cells. The model vaccine used in the examples is the EL4 lymphoma tumor and anti-GD2 IgG3 monoclonal antibody combination in mouse model, that induced an antitumor response, that was further enhanced by yeast β -glucan. Finally the inventors present the above vaccine combination in patients with refractory or recurrent metastatic stage 4 neuroblastoma.

AN 2009:233350 HCAPLUS <<LOGINID::20090611>>

DN 150:258240

TI β Glucan as immune adjuvant for anti-cancer vaccine

IN Cheung, Nai-Kong V.; Engstad, Rolf Einar

PA USA

SO U.S. Pat. Appl. Publ., 23pp., Cont.-in-part of U.S. Ser. No. 161,285.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20090053221	A1	20090226	US 2008-212352	20080917
	US 20060160766	A1	20060720	US 2006-334763	20060117 <--
	WO 2007084661	A2	20070726	WO 2007-US1427	20070117
	WO 2007084661	A3	20071108		
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	US 20090004201	A1	20090101	US 2008-161285	20080717
PRAI	US 2006-334763	A2	20060117		
	WO 2007-US1427	W	20070117		
	US 2008-161285	A2	20080717		
	US 2001-261911P	P	20010116 <--		
	WO 2002-US1276	A2	20020115 <--		
	US 2003-621027	A2	20030716 <--		
	WO 2004-US23099	A2	20040716		

US 2005-218044 A2 20050831

L8 ANSWER 2 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB A therapeutic composition for treatment of cancer in a mammal is disclosed. The composition comprises an effective amount of a glucan composition which is suitable for oral administration and for absorption through the gastrointestinal tract of the mammal, and at least one antibody for the cancer. A method of treating cancer in a mammal is also disclosed. The method comprises administering a suitable orally administered glucan and at least one antibody for the treatment of cancer to the mammal. In addition a composition for delivery of peptide, protein, RNA, DNA or plasmid comprising effective amount of a beta-glucan is disclosed.
AN 2006:707961 HCAPLUS <<LOGINID::20090611>>
DN 145:130897
TI Therapy-enhancing glucan
IN Cheung, Nai-Kong V.
PA Sloan-Kettering Institute for Cancer Research, USA
SO U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of U.S. Ser. No. 218,044.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060160766	A1	20060720	US 2006-334763	20060117 <--
	WO 2002058711	A1	20020801	WO 2002-US1276	20020115 <--
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	US 20040116379	A1	20040617	US 2003-621027	20030716 <--
	US 7507724	B2	20090324		
	WO 2005018544	A2	20050303	WO 2004-US23099	20040716 <--
	WO 2005018544	A3	20050609		
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	US 20060020128	A1	20060126	US 2005-218044	20050831 <--
	US 7462607	B2	20081209		
	CA 2637205	A1	20070726	CA 2007-2637205	20070117
	WO 2007084661	A2	20070726	WO 2007-US1427	20070117
	WO 2007084661	A3	20071108		
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GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

	EP 1984004	A2	20081029	EP 2007-718218	20070117
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	IN 2008MN01729	A	20090102	IN 2008-MN1729	20080812
	AU 2008207369	A1	20080911	AU 2008-207369	20080818
	CN 101426510	A	20090506	CN 2007-80007540	20080902
	US 20090053221	A1	20090226	US 2008-212352	20080917
PRAI	US 2001-261911P	P	20010116	<--	
	WO 2002-US1276	A2	20020115	<--	
	US 2003-621027	A2	20030716	<--	
	WO 2004-US23099	A2	20040716		
	US 2005-218044	A2	20050831		
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	WO 2007-US1427	W	20070117		
	US 2008-161285	A2	20080717		

L8 ANSWER 3 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN

AB Antibodies to antigen presenting cells may be utilized to interfere with the interaction of the antigen presenting cell and immune cells, including T cells. The antibodies are specific to antigen-internalizing receptor such as DEC-205, mannose receptor, DC-SIGN, DC-SIGNR (DC-SIGN-related), MHC, Toll receptor, langerin, asialoglycoprotein receptor, .beta .-glucan receptor, C-type lectin receptor and dendritic cell immunoreceptor. Peptides may be linked to said antibodies thereby generating an immune response to such peptides. Preferably peptides linked to the antibodies are associated with autoimmunity. The peptide is autoantigen such as glutamic acid decarboxylase or epitope, insulin or epitope, heat shock protein or epitope, or β cell antigen or epitope. The antigen-presenting cells are dendritic cells, macrophages, endothelial cells, Kupffer cells and B-cells. The antibodies may also linked to toxin, or tumor toxin. Further more, vaccine comprising antibody to DC-SIGN or L-SIGN may prevents entry of viruses into cells. In some embodiments, the invention provides chimeric antibodies that recognize an L-SIGN and block binding of HIVgp120 or Ebola envelope protein to L-SIGN or DC-SIGN; antibodies that recognize both an L-SIGN and a DC-SIGN and block binding of HIVgp120 or Ebola envelope protein to DC-SIGN. The antibody may bind to the same epitope as the epitope to which the Ebola envelope protein or the HIVgp120 binds.

AN 2005:1331738 HCAPLUS <<LOGINID::20090611>>

DN 144:68594

TI Treating autoimmune diseases and viral infection by inducing antigen presentation by tolerance inducing antigen presenting cells (APCs) using autoantigen peptides linked to APC antibodies

IN Bowdish, Katherine S.; Kretz-Rommel, Anke; Dakappagari, Naveen

PA USA

SO U.S. Pat. Appl. Publ., 119 pp., Cont.-in-part of U.S. Ser. No.16,647.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI US 20050281828 A1 20051222 US 2005-97812 20050401 <--
WO 2004091543 A2 20041028 WO 2004-US6570 20040304 <--
WO 2004091543 A3 20050414
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US 20060280679 A1 20061214 US 2004-16647 20041217 <--
AU 2005323187 A1 20060713 AU 2005-323187 20051216
CA 2591138 A1 20060713 CA 2005-2591138 20051216
WO 2006073748 A2 20060713 WO 2005-US45706 20051216
WO 2006073748 A3 20070118
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EP 1838734 A2 20071003 EP 2005-857105 20051216
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JP 2008524245 T 20080710 JP 2007-546951 20051216
PRAI US 2003-451816P P 20030304 <--
US 2003-529500P P 20031215 <--
US 2004-548385P P 20040228
WO 2004-US6570 A2 20040304
US 2004-16647 A2 20041217
US 2005-97812 A 20050401
WO 2005-US45706 W 20051216

L8 ANSWER 4 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB The invention discloses methods of producing an antigenic response in which an antigen is contacted to an antigen-presenting cell, wherein the improvement comprises contacting the antigen-presenting cell with an A1 adenosine receptor activating agent in an amount sufficient to increase the antigenic response of the antigen-presenting cell to the antigen. The invention further provides methods, compns., combination therapies, imaging techniques, and diagnostic kits that may improve the diagnosis, prognosis, and/or survival of cancer patients, pathogen-infected patients, and infectious or non-infectious immune-deficient patients.
AN 2005:260177 HCAPLUS <<LOGINID::20090611>>
DN 142:329847
TI Methods and compositions for producing increased antigenic response using adenosine A1 receptor-activating agents
IN Wilson, Constance N.; Borron, Paul
PA Endacea, Inc., USA
SO PCT Int. Appl., 56 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005026318	A2	20050324	WO 2004-US24693	20040730 <--
	WO 2005026318	A3	20050818		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2533926	A1	20050324	CA 2004-2533926	20040730 <--
	US 20050075308	A1	20050407	US 2004-903933	20040730 <--
	EP 1651259	A2	20060503	EP 2004-816171	20040730 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	JP 2007500721	T	20070118	JP 2006-522099	20040730 <--
PRAI	US 2003-491510P	P	20030731 <--		
	WO 2004-US24693	W	20040730		

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB Antibodies to antigen presenting cells may be utilized to interfere with the interaction of the antigen presenting cell and immune cells, including T cells. The antibodies are specific to antigen-internalizing receptor such as DEC-205, mannose receptor, DC-SIGN, DC-SIGNR, MHC, toll receptor, langerin, asialoglycoprotein receptor, β -glucan receptor, C-type lectin receptor and dendritic cell immunoreceptor. Peptides may be linked to said antibodies thereby generating an immune response to such peptides. The peptide is autoantigen such as glutamic acid decarboxylase or epitope, insulin or epitope, heat shock protein or epitope, or β cell antigen or epitope. The antigen-presenting cells are dendritic cells, macrophages, endothelial cells, Kupffer cells and B cells. The antibodies may also linked to toxin, or tumor toxin. Further more, vaccine comprising antibody to DC-SIGNR may prevents entry of viruses into liver cells.
AN 2004:902130 HCAPLUS <<LOGINID::20090611>>
DN 141:394080
TI Autoantigen epitopes linked to antibodies for inducing antigen presentation by tolerance-inducing antigen presenting cells and for treating autoimmune diseases
IN Bowdish, Katherine S.; Kretz-Rommel, Anke; Dakappagari, Naveen
PA Alexion Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004091543	A2	20041028	WO 2004-US6570	20040304 <--
	WO 2004091543	A3	20050414		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				

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            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
            ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
            SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
            TD, TG
    AU 2004229311        A1    20041028    AU 2004-229311         20040304 <--
    CA 2517926           A1    20041028    CA 2004-2517926        20040304 <--
    EP 1605974           A2    20051221    EP 2004-717386         20040304 <--
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
    CN 1756564           A     20060405    CN 2004-80005981       20040304 <--
    JP 2006521387        T     20060921    JP 2006-509074         20040304 <--
    US 20060280679       A1    20061214    US 2004-16647          20041217 <--
    US 20050281828       A1    20051222    US 2005-97812          20050401 <--
    US 20060257412       A1    20061116    US 2006-547571         20060615 <--
PRAI US 2003-451816P     P     20030304  <--
    US 2003-529500P      P     20031215  <--
    US 2004-548385P      P     20040228
    WO 2004-US6570       A     20040304
    US 2004-16647        A2    20041217

L8  ANSWER 6 OF 34  HCAPLUS  COPYRIGHT 2009 ACS on STN
AB  The invention provides methods for using neutral soluble glucan and
    monoclonal antibodies for antitumor therapy.  Neutral soluble β
    (1,3; 1,6) glucan enhances the tumoricidal activity of the innate immune
    system by binding to the C3 complement protein receptor CR3.  The glucan
    does not stimulate the induction of inflammatory cytokines.  Also
    described are methods of using whole glucan particles as an
    immunomodulator by inducing a shift from a Th2 response to the Th1
    response, leading to an enhanced antitumor cytotoxic T-cell response.
AN  2004:308355  HCAPLUS <<LOGINID::20090611>>
DN  140:297492
TI  Cancer therapy using β -glucan and
    monoclonal antibodies
IN  Ross, Gordon D.
PA  University of Louisville Research Foundation, Inc., USA
SO  PCT Int. Appl., 92 pp.
    CODEN: PIXXD2
DT  Patent
LA  English
FAN.CNT 2
    PATENT NO.           KIND   DATE        APPLICATION NO.        DATE
    ---------------      ----   --------    --------------------   --------
PI  WO 2004030613         A2    20040415    WO 2003-US27975        20030904 <--
    WO 2004030613         A3    20050113
        W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
            TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    CA 2496508            A1    20040415    CA 2003-2496508        20030904 <--
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	AU 2003295326	A1	20040423	AU 2003-295326	20030904 <--
	EP 1539194	A2	20050615	EP 2003-786508	20030904 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1694715	A	20051109	CN 2003-824893	20030904 <--
	CN 1697659	A	20051116	CN 2003-824895	20030904 <--
	CN 100363054	C	20080123		
	CN 1939335	A	20070404	CN 2006-10136269	20030904 <--
	US 20060009419	A1	20060112	US 2005-526185	20050803 <--
PRAI	US 2002-408126P	P	20020904 <--		
	CN 2003-824893	A3	20030904 <--		
	WO 2003-US27975	W	20030904 <--		

L8 ANSWER 7 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN

AB The present invention relates to methods of using whole glucan particles and complement activating antibodies for antitumor therapy. Whole glucan particles enhance the tumoricidal activity of the innate immune system by binding to the C3 complement protein receptor CR3. This binding enhances innate immune system cytotoxicity, as well as stimulating the release of activating cytokines.

AN 2004:220160 HCAPLUS <<LOGINID::20090611>>
DN 140:247055

TI Cancer therapy using whole glucan particles and antibodies

IN Ostroff, Gary R.; Ross, Gordon D.
PA Biopolymer Engineering, Inc., USA; University of Louisville Research Foundation, Inc.

SO PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004021994	A2	20040318	WO 2003-US27841	20030904 <--
	WO 2004021994	A3	20040812		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2496596	A1	20040318	CA 2003-2496596	20030904 <--
	AU 2003268486	A1	20040329	AU 2003-268486	20030904 <--
	EP 1536820	A2	20050608	EP 2003-749452	20030904 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1694715	A	20051109	CN 2003-824893	20030904 <--
	CN 1697659	A	20051116	CN 2003-824895	20030904 <--
	CN 100363054	C	20080123		
	JP 2006502167	T	20060119	JP 2004-534637	20030904 <--
	CN 1939335	A	20070404	CN 2006-10136269	20030904 <--
	US 20060165700	A1	20060727	US 2005-526175	20050729 <--
PRAI	US 2002-408126P	P	20020904 <--		
	CN 2003-824893	A3	20030904 <--		
	WO 2003-US27841	W	20030904 <--		

L8 ANSWER 8 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN

AB Sparassis crispa (SC) is culinary-medicinal mushroom recently cultivated in Japan, China, Germany, and the US. We purified a 6-branched 1,3-β-D-glucan preparation designated as SCG. SCG increased the number of leukocytes and enhanced the activity of leukocytes from various points of view, mainly analyzed in exptl. animals. In the present study, the cytokine capacity of SCG was examined in healthy volunteers in vitro, and the following characteristics were studied: SCG enhanced cytokine synthesis of whole blood cell culture dose dependently. A complement fragment, C5a, was released by SCG dependently upon dose. And anti-SCG natural antibody was detected in human plasma. From these facts, SCG has the capacity to activate human leukocytes and related immune systems. In a clin. trial, powder of SC (300 mg/day) was given orally to several cancer patients (lung, stomach, colon, breast, ovarian, uterine, prostate, pancreas, liver) after one course of treatment of lymphocyte transfer immunotherapy and follow-up for several months. Performance status of 14 cases were monitored and 9 cases were improved as CR (4), PR (5), and NC (5). These facts strongly suggest that Sparassis crispa is a good source for cancer immunotherapy.
AN 2004:186121 HCAPLUS <<LOGINID::20090611>>
DN 141:218546
TI Immunomodulating activity of a β -glucan preparation, SCG, extracted from a culinary-medicinal mushroom, Sparassis crispa Wulf.:Fr. (aphyllophoromycetideae), and application to cancer patients
AU Ohno, Naohito; Nameda, Sachiko; Harada, Toshie; Miura, Noriko N.; Adachi, Yoshiyuki; Nakajima, Mitsuhiro; Yoshida, Kenshi; Yoshida, Hitoji; Yadomae, Toshiro
CS School of Pharmacy, Tokyo University of Pharmacy and Life Science, Hachioji, Tokyo, Japan
SO International Journal of Medicinal Mushrooms (2003), 5(4), 359-368
CODEN: IMMUFR; ISSN: 1521-9437
PB Begell House, Inc.
DT Journal
LA English
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB The present invention provides a means to broadly protect the military and the public from injury from biol. warfare weapons, particularly infective agents such as anthrax. Beta (1,3)-glucans, particularly whole glucan particles, PGG-Glucan, and microparticulate glucan, provide general immune enhancement, thereby increasing the body's ability to defend against a wide variety of biol. threats. Beta (1,3)-glucans have been shown to increase the resistance to infection by anthrax and other infectious organisms when administered before and after infection. The anti-infective mechanism of β(1,3)-glucan appears to involve stimulation of the innate immune system through increased cytokine release and CR3 receptor activation. Beta (1,3)-glucan is pharmaceutically stable, relatively compact, and can also be used without significant side effects. Beta (1,3)-glucan can also enhance the effectiveness of other medical countermeasures such as antibiotics, vaccines, and immune antibodies.
AN 2004:60137 HCAPLUS <<LOGINID::20090611>>
DN 140:87747
TI Use of beta-glucans against biological warfare weapons and pathogens including anthrax
IN Ostroff, Gary R.
PA USA
SO U.S. Pat. Appl. Publ., 23 pp.

CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20040014715	A1	20040122	US 2002-268201	20021009 <--
	CA 2501889	A1	20050217	CA 2003-2501889	20031009 <--
	WO 2005014776	A2	20050217	WO 2003-US32196	20031009 <--
	WO 2005014776	A3	20050707		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003304397	A1	20050225	AU 2003-304397	20031009 <--
	EP 1567170	A2	20050831	EP 2003-816735	20031009 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1723027	A	20060118	CN 2003-80105493	20031009 <--
	IN 2005CN00565	A	20070622	IN 2005-CN565	20050407 <--
PRAI	US 2001-328206P	P	20011009	<--	
	US 2002-268201	A	20021009	<--	
	WO 2003-US32196	W	20031009	<--	

L8 ANSWER 10 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN

AB The tumor-killing mechanisms available to monoclonal antibodies (mAbs; e.g., antagonism of growth factor receptors, antibody-dependent cell-mediated cytotoxicity) limit efficacy. Previous studies suggested that i.v β -glucan might function as an adjuvant for antitumor mAbs. β -Glucan had been shown to function via the iC3b-receptor complement receptor 3 (CR3; CD11b/CD18) thereby enhancing leukocyte killing of tumor cells coated with iC3b via naturally occurring antitumor antibodies. Therapy with β-glucans was limited by levels of natural antibodies and by tumor escape through elimination of antigen-pos. cells. Accordingly, it was hypothesized that .beta .-glucan responses could be improved by combined administration with antitumor mAbs. Five tumor models were explored in BALB/c or C57Bl/6 mice using tumors that expressed either high levels of naturally occurring antigens (e.g., GD2 ganglioside) or recombinant human MUC1. In comparison with antitumor mAb or β -glucan alone, combined treatment with mAb plus β -glucan produced significantly greater tumor regression in all models that included mammary, s.c., and hepatic tumors. Tumor-free survival only occurred in models that incorporated stable expression of the target antigen. β -Glucan enhancement of the mAb tumoricidal response did not occur in mice deficient in either leukocyte CR3 (CD11b-/-) or serum C3, confirming the requirement for CR3 on leukocytes and iC3b on tumors. Granulocytes appeared to be primarily responsible for tumoricidal activity, because β -glucan therapeutic responses did not occur in granulocyte-depleted mice. These data suggest that the therapeutic efficacy of mAbs known to activate complement (e.g., Herceptin, Rituxan, and Erbitux) could be significantly enhanced if they were combined with β -glucan.

AN 2003:1009792 HCAPLUS <<LOGINID::20090611>>
DN 140:92448
TI β -Glucan Functions as an Adjuvant for Monoclonal Antibody Immunotherapy by Recruiting Tumoricidal Granulocytes as Killer Cells
AU Hong, Feng; Hansen, Richard D.; Yan, Jun; Allendorf, Daniel J.; Baran, Jarek T.; Ostroff, Gary R.; Ross, Gordon D.
CS James Graham Brown Cancer Center and Department of Microbiology and Immunology, University of Louisville, Louisville, KY, 40202, USA
SO Cancer Research (2003), 63(24), 9023-9031
CODEN: CNREA8; ISSN: 0008-5472
PB American Association for Cancer Research
DT Journal
LA English
RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB β-1,3-Glucans are well known to enhance the immune reactions, resulting in antitumor, antibacterial, antiviral, anticoagulant, and wound healing activities. β-1,3-Glucans have various activities depending on mol. weight, degree of branching, conformation, water-solubility, and intermol.
association However, the β-1,3-glucan-linked backbone structure is essential and β-D-glucopyranosyl units are required for immunopotentiating activities. Here, the authors tested the immunopharmacol. activities of insol. β-1,3-glucan from Agrobacterium sp. R259 KCTC 10197BP and confirmed the following activities: (1) IFN-γ production in PBMCs in the presence or in the absence of PHA, LPS, IL-18, and IL-12; (2) the induction of various cytokines in the spleen and thymus; (3) the adjuvant effect on the antibody production; (4) the cytotoxic and antitumor effects on cell lines and ICR mice. Thus, β-1,3-glucan from Agrobacterium sp. R259 KCTC 10197BP has various immunopharmacol. activities.
AN 2003:992228 HCAPLUS <<LOGINID::20090611>>
DN 140:104777
TI Immunostimulating efficacy of insoluble β-1,3-glucan from Agrobacterium sp. R259 KCTC 10197BP
AU Shim, Jung-Hyun; Choi, Won-A.; Sang, Byung-Chan; Yoon, Do-Young
CS Lab. of Cellular Biology, Korea Res. Inst. of Bioscience and Biotechnology, Taejon, 305-600, S. Korea
SO Yakhak Hoechi (2002), 46(6), 459-465
CODEN: YAHOA3; ISSN: 0513-4234
PB Pharmaceutical Society of Korea
DT Journal
LA Korean

L8 ANSWER 12 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB Unavailable
AN 2003:976630 HCAPLUS <<LOGINID::20090611>>
DN 141:21979
TI Determination of the potential use of beta-glucan as an adjuvant for monoclonal antibody immunotherapy of cancer
AU Hong, Feng
CS Univ. of Louisville, Louisville, KY, USA
SO (2002) 137 pp. Avail.: UMI, Order No. DA3078067
From: Diss. Abstr. Int., B 2003, 64(1), 135
DT Dissertation
LA English

L8 ANSWER 13 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB Sparassis crispa is edible mushroom recently cultivable in Japan. It contains significantly high content (.apprx.40%) of 6-branched 1,3-β-D-glucan showing antitumor activity in mice. We recently purified a β -glucan preparation designated as "SCG.". It was considered worth while to test SCG in vitro with whole blood collected from human volunteers. The present study is focusing on the cytokine productivity of SCG in an in vitro human system. The following results were observed: (i) SCG dose dependently enhanced IL-8 synthesis of whole blood cell culture of human peripheral blood. (ii) IL-8 synthesis was enhanced in both PBMC and PMN cultures. (iii) IL-8 synthesis was induced in the culture with autologous plasma, but significantly reduced after 56°C treatment. (iv) The activity was also weak in heat inactivated fetal calf serum (FCS). (v) A complement fragment, C5a, was released by SCG dependently upon dose and kinetics. (vi) Anti-SCG natural antibody was detected in human plasma. From these facts, SCG was observed to have the capacity to activate human leukocytes and related immune system.
AN 2003:694246 HCAPLUS <<LOGINID::20090611>>
DN 140:210181
TI Enhanced Cytokine Synthesis of Leukocytes by a β -Glucan Preparation, SCG, Extracted from a Medicinal Mushroom, Sparassis crispa
AU Nameda, Sachiko; Harada, Toshie; Miura, Noriko N.; Adachi, Yoshiyuki; Yadomae, Toshiro; Nakajima, Mitsuhiro; Ohno, Naohito
CS School of Pharmacy, Laboratory for Immunopharmacology of Microbial Products, Tokyo University of Pharmacy and Life Science, Tokyo, Japan
SO Immunopharmacology and Immunotoxicology (2003), 25(3), 321-335
CODEN: IITOEF; ISSN: 0892-3973
PB Marcel Dekker, Inc.
DT Journal
LA English
RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB A substance capable of direct interaction with Dectin-1, said substance not inhibiting the binding of T cells to cells expressing Dectin-1, is useful because Dectin-1 has now been identified as the therapeutically effective β -glucan receptor. Antibodies which interact with Dectin-1 can be used to detect the presence of Dectin-1 or cells expressing Dectin-1. These antibodies can also be used to sep. cells expressing Dectin-1 from cells which do not, and using such cells in treatment following an immune comprising regimen. Antibodies which block the activity of Dectin-1 can be used in the treatment of diseases associated with macrophage activation, such as asthma, hay fever, and allergic dermatitis. Oligosaccharides or glycoproteins can also interact with Dectin-1, and must comprise more than 7 hexose subunits and contain β-1,3 or β-1,6 linkages. These oligosaccharides target the . beta.-glucan binding site and induce macrophage activation, and can be used in treatment of infection, cancer, transplant rejection, wound healing, and radiation damage.
AN 2002:927463 HCAPLUS <<LOGINID::20090611>>
DN 138:23683
TI Macrophage receptor Dectin-1
IN Brown, Gordon D.; Gordon, Siamon
PA Isis Innovation Limited, UK
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DT Patent
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002096945	A2	20021205	WO 2002-GB2457	20020524 <--
	WO 2002096945	A3	20030220		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002302774	A1	20021209	AU 2002-302774	20020524 <--
	EP 1406638	A2	20040414	EP 2002-730453	20020524 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	GB 2001-12649	A	20010524 <--		
	WO 2002-GB2457	W	20020524 <--		

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 15 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN

AB β -Glucan primes leukocyte CR3 for enhanced cytotoxicity and synergizes with anti-tumor monoclonal antibodies (mAb). We studied readily available (1→3)-β-D-glucan using the immune deficient xenograft tumor models, and examined the relationship of its anti-tumor effect and physico-chemical properties. Established s.c. human xenografts were treated for 29 days orally with daily β -glucan by intragastric injection and mAb i.v. twice weekly. Control mice received either mAb alone or β -glucan alone. Tumor sizes were monitored over time. β-Glucans were studied by carbohydrate linkage anal., and high performance size-exclusion chromatog. with multiple angle laser scattering detection. Orally administered β-D-glucan greatly enhanced the anti-tumor effects of mAb against established tumors in mice. We observed this β -glucan effect irresp. of antigen (GD2, GD3, CD20, epidermal growth factor-receptor, HER-2), human tumor type (neuroblastoma, melanoma, lymphoma, epidermoid carcinoma and breast carcinoma) or tumor sites (s.c. vs. systemic). This effect correlated with the mol. size of the (1→3),(1→4)-β-D-glucan. Orally administered (1→3),(1→6)-β-D-glucans also synergized with mAb, although the effect was generally less marked. Given the favorable efficacy and toxicity profile of oral β-D-glucan treatment, the role of natural products that contain β -glucan in cancer treatment as an enhancer of the effect of mAb therapy deserves further study.

AN 2002:789653 HCAPLUS <<LOGINID::20090611>>
DN 139:127490

TI Orally administered β-glucans enhance anti- tumor effects of monoclonal antibodies

AU Cheung, Nai-Kong V.; Modak, Shakeel; Vickers, Andrew; Knuckles, Benny
CS Department of Pediatrics, Memorial Sloan-Kettering Cancer Center, New York, NY, 10021, USA

SO Cancer Immunology Immunotherapy (2002), 51(10), 557-564
CODEN: CIIMDN; ISSN: 0340-7004
PB Springer-Verlag
DT Journal

LA English
RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 16 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB This invention provides a composition comprising an effective amount of glucan capable of enhancing efficacy of antibodies. This invention further provides the above compns. and a pharmaceutically acceptable carrier. This invention also provides a method for treating a subject with cancer comprising administrating the above-described composition comprising effective amount of glucan capable of enhancing efficacy of vaccines. This invention provides a composition comprising effective amount of glucan capable of enhancing efficacy of vaccines. This invention also provides a method of treating a subject comprising administrating the above pharmaceutical composition to the subject. This invention provides a composition comprising effective amount of glucan capable of enhancing efficacy of natural antibodies. This invention provides a composition comprising effective amount of glucan capable of enhancing host immunity. This invention also provides a composition comprising effective amount of glucan capable of enhancing the action of an agent in preventing tissue rejection. It was shown that β-glucans greatly enhanced the antitumor effects of monoclonal antibodies against established tumors in mice.
AN 2002:574940 HCAPLUS <<LOGINID::20090611>>
DN 137:119657
TI Antitumor antibody-enhancing glucan
IN Cheung, Nai-Kong V.
PA Sloan-Kettering Institute for Cancer Research, USA
SO PCT Int. Appl., 114 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002058711	A1	20020801	WO 2002-US1276	20020115 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2434938	A1	20020801	CA 2002-2434938	20020115 <--
	AU 2002241905	A1	20020806	AU 2002-241905	20020115 <--
	EP 1357919	A1	20031105	EP 2002-707502	20020115 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 20040116379	A1	20040617	US 2003-621027	20030716 <--
	US 7507724	B2	20090324		
	US 20060020128	A1	20060126	US 2005-218044	20050831 <--
	US 7462607	B2	20081209		
	US 20060160766	A1	20060720	US 2006-334763	20060117 <--
	US 20080193456	A1	20080814	US 2008-36462	20080225 <--
PRAI	US 2001-261911P	P	20010116 <--		
	WO 2002-US1276	W	20020115 <--		
	US 2003-621027	A1	20030716 <--		
	WO 2004-US23099	A2	20040716		
	US 2005-218044	A2	20050831		

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 17 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB In vitro β -glucan can enhance tumor cytotoxicity through iC3b receptors on leukocytes. We tested if (1→3), (1→4)-β-D-glucan (β -glucan) can synergize with anti-GD2 monoclonal antibody (MoAb) 3F8 (mouse IgG3) in therapy of human neuroblastoma xenografts. Athymic nude mice with established neuroblastoma xenografts were treated with daily i.p. or p.o. β -glucan, in the presence/absence of i.v. MoAb twice a week, for 22-29 days. Serial tumor vols. and body wts. were monitored. 3F8 plus .beta .-glucan produced near-complete tumor regression/disease stabilization, whereas 3F8 or β -glucan alone did not significantly affect tumor growth. For NMB7 tumors, median survival of 3F8 plus β -glucan group was 5.5-fold that of control groups ($P < 0.001$), and for LAN-1, the survival difference was 2.6-fold. Forty-seven percent of the mice with NMB7 and 18% with LAN-1 remained progression free in contrast to <3% of controls. Antitumor effect was seen at ≥40 μg of glucan dose, i.v. or p.o., and in all human neuroblastoma cell lines tested. No toxicities were noted in mice treated with either . beta.-glucan alone or 3F8 plus β -glucan (4-4000 μg/dose). In contrast to anti-GD2 MoAb 3G6 (IgM), 3F8 F(ab')2 and MoAb 8H9 (IgG1) did not activate complement and had no synergy with β -glucan. Antitumor effect of 3F8 plus p.o. β -glucan persisted after antiasialo-GM1 antibody treatment, as well as in NK-deficient host. p.o. 1,3-1,4-β -glucan synergized with antitumor IgG and IgM MoAb in vivo. Because β -glucan was well tolerated and inexpensive, its potential value in cancer therapy deserves further investigation.
AN 2002:441006 HCAPLUS <<LOGINID::20090611>>
DN 137:231044
TI Oral (1→3),(1→4)-β-D-glucan synergizes with antiganglioside GD2 monoclonal antibody 3F8 in the therapy of neuroblastoma
AU Cheung, Nai-Kong V.; Modak, Shakeel
CS Department of Pediatrics, Memorial Sloan-Kettering Cancer Center, New York, NY, 10021, USA
SO Clinical Cancer Research (2002), 8(5), 1217-1223
CODEN: CCREF4; ISSN: 1078-0432
PB American Association for Cancer Research
DT Journal
LA English
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 18 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB A review. Plants and Fungi have traditionally been the single largest source of lead compds. for the development of therapeutics by the pharmaceutical industry. Currently mushroom and plant polysaccharides brought to attention by Complementary and Alternative medicine, are undergoing scientific anal. and development to prevent and treat cancer. Two classes of saccharides are under investigation- beta glucan polysaccharides as biol. response modifiers for the adjuvant treatment of cancer and "Oligosaccharin"-related oligosaccharides for the prevention of sun-induced skin cancer. Beta glucans already in human trials in the Far East will require mechanistic pharmacol. studies and definition

of structure function relationships before they are ready for clin. trials in the West. Other beta glucans that prime natural killer cells for antibody dependent cell-mediated cytotoxicity are approaching clin. trials. Oligosaccharides that downregulate production of immuno-suppressive cytokines by UV radiation injured keratinocytes are promising agents for the prevention of environmental skin cancer .

AN 2001:398732 HCAPLUS <<LOGINID::20090611>>
DN 136:160666
TI Plants, polysaccharides, and the treatment and prevention of neoplasia
AU Pelley, Ronald P.; Strickland, Faith M.
CS Pangea Phytoceuticals, Harlingen, TX, 78550, USA
SO Critical Reviews in Oncogenesis (2000), 11(3&4), 189-225
CODEN: CRONEI; ISSN: 0893-9675
PB Begell House, Inc.
DT Journal; General Review
LA English
RE.CNT 197 THERE ARE 197 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 19 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB A method of treatment of disease by inhibition of cellular secretory processes is provided. The method has particular application in the treatment of diseases dependent on the exocytotic activity of endocrine cells, exocrine cells, inflammatory cells, cells of the immune system, cells of the cardiovascular system, and bone cells. Agents and compns. therefor, as well as methods for manufacturing these agents and compns., are provided. In a preferred embodiment a clostridial neurotoxin, substantially devoid of holotoxin binding affinity for neuronal cells of the presynaptic muscular junction, is associated with a targeting moiety. The targeting moiety is selected such that the clostridial toxin conjugate so formed may be directed to a non-neuronal target cell to which the conjugate may bind. Following binding, a neurotoxin component of the conjugate, which is capable of inhibition of cellular secretion, passes into the cytosol of the target cell by cellular internalization mechanisms. Thereafter, inhibition of secretion from the target cell is effected.
AN 2001:228744 HCAPLUS <<LOGINID::20090611>>
DN 134:247267
TI Clostridial neurotoxin targeted conjugates for inhibition of secretion from non-neuronal cells
IN Foster, Keith Alan; Chaddock, John Andrew; Purkiss, John Robert; Quinn, Conrad Padraig
PA Microbiological Research Authority, UK
SO PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001021213	A2	20010329	WO 2000-GB3669	20000925 <--
WO 2001021213	A3	20020711		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA	2383470	A1	20010329	CA 2000-2383470	20000925 <--
EP	1235594	A2	20020904	EP 2000-962721	20000925 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP	2003509476	T	20030311	JP 2001-524636	20000925 <--
AU	782457	B2	20050728	AU 2000-74365	20000925 <--
US	20030180289	A1	20030925	US 2002-88665	20020814 <--
AU	2005227383	A1	20051124	AU 2005-227383	20051027 <--
AU	2005227383	B2	20080821		
AU	2008241572	A1	20081127	AU 2008-241572	20081031
PRAI GB	1999-22554	A	19990923 <--		
WO	2000-GB3669	W	20000925 <--		
AU	2005-227383	A3	20051027		

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 20 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN

AB Antibodies against an antitumor β -glucan purified from Grifola frondosa (GGF) were raised in the rabbit by s.c. immunization. Our antibodies reacted significantly with GGF by an ELISA inhibition assay. The antibodies did not recognize other polysaccharides such as laminarin and pustulan, but reacted somewhat with lentinan, whose structure is similar to GGF. It was demonstrated that GGF could be measured by ELISA using antibodies. In addition, the effects of the storage temperature on GGF content during storage were measured using our antibody. GGF content was 24.7 μg/g fresh weight (f.w.) at zero time storage, and little change occurred during storage of the mushroom for 7 days at 5°. However, a drastic decrease to 11.4 μg/g f.w. occurred after 7 days of storage at 20°. These results suggest that storage at low temps. is desirable to maintain the quality of GGF.

AN 2000:308382 HCAPLUS <<LOGINID::20090611>>
DN 133:320973
TI Preparation of antibody against antitumor β -glucan in Grifola frondosa and its application
AU Mizuno, Masashi; Yamakawa, Akio; Minato, Ken-Ichiro; Kawakami, Sachiko; Tatsuoka, Shigenobu; Terai, Hirofumi; Tsuchida, Hironobu
CS Graduate School of Science and Technology, Kobe University, Kobe, 657-8501, Japan
SO Food Science and Technology Research (1999), 5(4), 398-401
CODEN: FSTRFS; ISSN: 1344-6606
PB Japanese Society for Food Science and Technology
DT Journal
LA English
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 21 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN

AB We have established a convenient, two-step procedure to solubilize the yeast cell wall (1→3)-β-D-glucan using the combination of NaClO oxidation and DMSO extraction Candida soluble β-D-glucan (CSBG) was mainly composed of a linear β-1,3 glucan with a linear β-1,6-glucan moiety. In this study, we screened for several immunopharmacol. activities of CSBG and found the following activities: (1) interleukin-6 synthesis of macrophages in vitro; (2) antagonistic effect for zymosan mediated-tumor necrosis factor synthesis of macrophages; (3) augmentation for lipopolysaccharide mediated tumor necrosis factor and nitrogen oxide syntheses of macrophages; (4) activation of alternative pathway of complement; (5) hematopoietic response on cyclophosphamide induced leukopenia; (6) the antitumor effect

on ascites form tumor; (7) Enhanced vascular permeability; (8) priming effect on lipopolysaccharide triggered TNF-α synthesis; and (9) adjuvant effect on antibody production These results strongly suggested that CSBG possessed various immunopharmacol. activity.
AN 2000:235041 HCAPLUS <<LOGINID::20090611>>
DN 133:12504
TI Immunopharmacological and immunotoxicological activities of a water-soluble (1 → 3)-β-D-glucan, CSBG from Candida spp
AU Tokunaka, Kazuhiro; Ohno, Naohito; Adachi, Yoshiyuki; Tanaka, Shigenori; Tamura, Hiroshi; Yadomae, Toshiro
CS Laboratory for Immunopharmacology of Microbial Products, School of Pharmacy, Tokyo University of Pharmacy and Life Science, Tokyo, 192-0392, Japan
SO International Journal of Immunopharmacology (2000), 22(5), 383-394
CODEN: IJIMDS; ISSN: 0192-0561
PB Elsevier Science Ltd.
DT Journal
LA English
RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 22 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB Schizophyllan (SPG, Sonifilan) is a soluble (1→3)-β-D-glucan, used as a biol. response modifier (BRM) with radiation therapy for cancer treatment in Japan. The mechanism of SPG-mediated antitumor activity is thought to be via immune stimulation, which includes cytokine production, hematopoietic response, and so on. In this paper, we found that the activity of SPG was quite long-lived and an overdose significantly failed to display the antitumor activity. To demonstrate the mechanism several parameters were examined using a high dose of SPG administration as follows: i) the effect on vascular permeability in vivo, ii) the priming effect on tumor necrosis factor (TNF-α) production in vivo, iii) the effect on macrophage adherence to plastic plate in vitro, and iv) anti-Sarcoma 180 antibody production in vivo. It was evident that vascular permeability and anti-Sarcoma 180 antibody production remained unchanged, but TNF-α production and adherence to a plastic plate was significantly reduced by a high dose of SPG. These facts strongly suggested that modulation of the cytokine syntheses and the leukocyte traffic would be the causative mechanisms of the failure of antitumor activity by an overdose of SPG.
AN 2000:97854 HCAPLUS <<LOGINID::20090611>>
DN 132:245973
TI Failure in antitumor activity by overdose of an immunomodulating .beta.-glucan preparation, sonifilan
AU Miura, Toshihide; Miura, Noriko N.; Ohno, Naohito; Adachi, Yoshiyuki; Shimada, Shigehiko; Yadomae, Toshiro
CS Laboratory for Immunopharmacology of Microbial Products, School of Pharmacy, Tokyo University of Pharmacy and Life Science, Tokyo, 192-0392, Japan
SO Biological & Pharmaceutical Bulletin (2000), 23(2), 249-253
CODEN: BPBLEO; ISSN: 0918-6158
PB Pharmaceutical Society of Japan
DT Journal
LA English
RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 23 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB We provide data on in vivo targeting of the Thy 1.2 (CDw90) cell surface receptor expressed on neoplastic T cells, mouse EL4 T cell

lymphoma. The targeting antibody and the anticancer drug, doxorubicin (DOX) were conjugated to a water-soluble copolymer based on N-(2-hydroxypropyl)methacrylamide (HPMA) acting as a carrier responsible for controlled intracellular release of the conjugated drug. The in vivo therapeutic efficacy of HPMA copolymer-bound DOX targeted with anti-EL4 antibody, polyclonal anti-thymocyte globulin (ATG), monoclonal anti-Thy 1.2 antibody or its F(ab')2 fragment was compared with the efficacy of DOX conjugated to HPMA copolymer containing nonspecific IgG or bovine serum albumin (BSA). Anti-EL4 antibody -targeted conjugate caused a significant retardation of tumor growth and an extension of the life span of treated mice. The effect was comparable with that of HPMA copolymer-bound DOX targeted with ATG, anti-Thy 1.2 antibody or its F(ab')2 fragment. However, considerable antitumor effect was seen also in conjugates targeted instead of specific antibodies with syngeneic nonspecific IgG or BSA. Patients with advanced cancer are often immunocompromised due to dysfunction of their immune system induced by cancer and cytotoxic drugs. A significant decrease of unwanted side-effects of targeted drugs against a number of vital organs was already documented. In this study we have compared immunotoxic effects of free DOX with those of its antibody-targeted form on NK cells and cytolytic T lymphocytes (CTLs) isolated from C57BL/10 mice bearing EL4 T cell lymphoma. In the same model we have tested the combination therapy with immunomodulators (β -glucan or AM-2) injected together with targeted daunomycin. We have observed a significant protective effect of targeted DOX against NK cells and CTLs. Moreover, the data revealed that combination therapy considerably enhances antitumor efficacy of the targeted anticancer drug.

AN 2000:46595 HCAPLUS <<LOGINID::20090611>>

DN 132:284054

TI Polymeric drugs based on conjugates of synthetic and natural macromolecules. II. Anti-cancer activity of antibody or (Fab')2-targeted conjugates and combined therapy with immunomodulators

AU Rihova, B.; Jelinkova, M.; Strohalm, J.; Subr, V.; Plocova, D.; Hovorka, O.; Novak, M.; Plundrova, D.; Germano, Y.; Ulbrich, K.

CS Institute of Microbiology, Academy of Sciences of the Czech Republic, Prague, 142 20, Czech Rep.

SO Journal of Controlled Release (2000), 64(1-3), 241-261
CODEN: JCREEC; ISSN: 0168-3659

PB Elsevier Science Ireland Ltd.

DT Journal

LA English

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 24 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN

AB Penicillium marneffei, a dimorphic fungus endemic in parts of Asia, causes disease in those with impaired cell-mediated immunity, especially persons with AIDS. The histopathol. of penicilliosis marneffei features the intracellular infection of macrophages. The authors studied the interactions between human leukocytes and heat-killed yeast-phase P. marneffei. Monocyte-derived macrophages bound and internalized P. marneffei in the presence of complement-sufficient pooled human serum (PHS). Binding and phagocytosis were still seen if PHS was heat inactivated or omitted altogether. The binding of unopsonized P. marneffei to monocyte-derived macrophages occurred in the absence of divalent cations and was not affected by inhibitors of mannose and . beta.-glucan receptors or monoclonal antibodies directed against CD14 and CD11/CD18. Binding was profoundly inhibited by wheat germ agglutinin. A vigorous respiratory burst was seen in peripheral blood mononuclear cells (PBMC) stimulated with P. marneffei,

regardless of whether the fungi were opsonized. However, tumor necrosis factor alpha (TNF-α) release from PBMC stimulated with P. marneffei occurred only if serum was present. These data demonstrate that (i) monocyte-derived macrophages bind and phagocytose P. marneffei even in the absence of opsonization, (ii) binding is divalent cation independent but is inhibited by wheat germ agglutinin, suggesting that the major receptor(s) recognizing P. marneffei is a glycoprotein with exposed N-acetyl-β-D-glucosaminyl groups, (iii) P. marneffei stimulates the respiratory burst regardless of whether opsonins are present, and (iv) serum factors are required for P. marneffei to stimulate TNF-α release. The ability of unopsonized P. marneffei to parasitize mononuclear phagocytes without stimulating the production of TNF-α may be critical for the virulence of this intracellular parasite.

AN 1999:554591 HCAPLUS <<LOGINID::20090611>>
DN 131:285214
TI Interactions of Penicillium marneffei with human leukocytes in vitro
AU Rongrungruang, Yong; Levitz, Stuart M.
CS The Evans Memorial Department of Clinical Research and the Department of Medicine, Boston University School of Medicine, Boston, MA, 02118, USA
SO Infection and Immunity (1999), 67(9), 4732-4736
CODEN: INFIBR; ISSN: 0019-9567
PB American Society for Microbiology
DT Journal
LA English
RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 25 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB Zymosan, a particulate β -glucan preparation from Saccharomyces cerevisiae, shows various biol. activities, including anti-tumor activity. We have previously shown that soluble .beta .-glucan initiated anti-tumor activity was long-lived and was effective even by prophylactic treatment at 1 mo prior to tumor challenge. However, the activity by zymosan was relatively short-lived. Antigen-specific responses of mice to zymosan might be a causative mechanism. In this paper, mice were immunized with zymosan and antibody production and antigen-specific responses of lymphocytes to zymosan were analyzed. Sera of zymosan immune mice contained zymosan-specific IgG assessed by ELISA and FACS. Spleen and bone marrow cells of zymosan-immune mice showed higher cytokine production in response to zymosan. Specificity of zymosan-specific responses were also analyzed using various derivs. prepared from zymosan. These facts strongly suggested that mice recognize zymosan as antigen in addition to non-specific immune stimulant.

AN 1999:311543 HCAPLUS <<LOGINID::20090611>>
DN 131:128740
TI Antigen-specific response of murine immune system toward a yeast . beta.-glucan preparation, zymosan
AU Miura, T.; Ohno, N.; Miura, N. N.; Adachi, Y.; Shimada, S.; Yadomae, T.
CS School of Pharmacy, Laboratory for Immunopharmacology of Microbial Products, Tokyo University of Pharmacy and Life Science, Hachioji, Tokyo, 192-0392, Japan
SO FEMS Immunology and Medical Microbiology (1999), 24(2), 131-139
CODEN: FIMIEV; ISSN: 0928-8244
PB Elsevier Science B.V.
DT Journal
LA English
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 26 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN

AB A gel-forming (1→3)-β-D-glucan, grifolan (GRN) from an edible mushroom (Grifola frondosa), enhances various immunol. activities. Here, effect of GRN on the induction of cytokines and nitric oxide by macrophage (MP) cell line (RAW264.7), peritoneal MP (PM), and Kupffer cell is shown. GRN bound to MP was detected immunohistochem., using an anti-GRN antibody. GRN could induce production of TNFα, IL-1α, and IL-6 by RAW264.7. Incubation with GRN also induced those cytokines in PM. GRN induced phosphorylation of MAP kinase and p38 of PM. The kinetic study on the activation of Kupffer cells revealed that GRN could induce enhanced production of cytokines and nitric oxide on days 4-7 after i.v. administration of GRN. Cytostatic activity of Kupffer cells against murine lymphoma, EL-4, was also augmented by GRN with similar time course to nitric oxide production The cytostatic activity was dependent on nitric oxide, since an iNOS inhibitor diminished the cytostatic activity. Administration of GRN increased expression of CD11b, known as the . beta.-glucan receptor, on Kupffer cells on day 7. Apparently, GRN can activate murine MPs to enhance production of cytokines and nitric oxide.

AN 1998:453248 HCAPLUS <<LOGINID::20090611>>

DN 129:211409

OREF 129:42767a,42770a

TI Activation of murine macrophages by grifolan

AU Adachi, Y.; Takano, E.; Ohno, N.; Yadomae, T.

CS School of Pharmacy, Tokyo University of Pharmacy and Life Science, Tokyo, Japan

SO Proceedings - Beltwide Cotton Conferences (1998), (Vol. 1), 262-266
CODEN: PCOCEN; ISSN: 1059-2644

PB National Cotton Council

DT Journal

LA English

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 27 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN

AB In a previous study, we reported an increase in the number of Ig-secreting cells and the augmentation of antibody production (IgM and IgG3) against unrelated antigens (sheep erythrocytes or bovine serum albumin (BSA)) in mice infected with the fungus Paracoccidioides brasiliensis as well as in mice inoculated with its cell wall preparation (CW). The immunomodulatory effect of the live fungus and CW preparation was dose-dependent and mainly restricted to the i.p. inoculation simultaneously to the BSA challenge by the i.v. route. In the present study, we investigated the active component of CW preparation upon the phenotype and also the degree of activation of possible target peritoneal cells involved in those phenomena. An insol. polysaccharide fraction (F1 fraction) mainly composed of β -glucan and chitin, and the purified β -glucan (BGPb) behaved as CW in the augmentation of early antibody production The peritoneal mononuclear inflammatory cells induced by CW, F1 fraction and BGPb were highly pos. to α-naphthyl esterase staining; released low H2O2; expressed high levels of MHC-Iad mols. and produced inflammatory cytokines such as tumor necrosis factor-alpha (TNF-α) and IL-6. Phenotypic anal. by flow cytometry and immunohistochem. techniques of the inflammatory cells responding to F1 fraction showed a prevalence of (CD11b/CD18, Mac-1)+ peritoneal macrophages. In addition, s.c. inoculation of F1 fraction resulted in the formation of nodular, localized and not progressive granulomatous lesions with an accumulation of (CD11b/C18)+ macrophages. Adoptive transferred Mac-1 macrophages to immunized syngeneic recipient mice were able to cause an increase in anti-BSA antibody production These results suggest that inflammatory

(CD11b/CD18)+ macrophages may be related to immunol. disturbances, caused by cell wall components of P. brasiliensis.
AN 1997:561058 HCAPLUS <<LOGINID::20090611>>
DN 127:233327
OREF 127:45511a,45514a
TI Cellular requirements for immunomodulatory effects caused by cell wall components of Paracoccidioides brasiliensis on antibody production
AU Silva, M. F.; Bocca, A. L.; Ferracini, R., Jr.; Figueiredo, F.; Silva, C. L.
CS Department of Parasitology, Microbiology and Immunology, School of Medicine of Ribeirao Preto, University of Sao Paulo, Ribeirao Preto, 140490-900, Brazil
SO Clinical and Experimental Immunology (1997), 109(2), 261-271
CODEN: CEXIAL; ISSN: 0009-9104
PB Blackwell
DT Journal
LA English

L8 ANSWER 28 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB Antibodies against β -glucan, lentinan from "Shittake" (Lentinus edodes), were raised in the rabbit by s.c. immunization. Our antibodies reacted significantly with lentinan by inhibition assay of ELISA. The antibodies did not recognize the other polysaccharides such as amylose, dextran, laminarin and galactan. It was proved that lentinan contents in mushroom could be measured by ELISA with the anti-lentinan antisera. Its contents were 3.5 mg/g fresh weight in Lentinus edodes. However, lentinan was not contained in Agaricus brazei, Agaricus bisporus and Romania bitrytis.
AN 1997:90871 HCAPLUS <<LOGINID::20090611>>
DN 126:170161
OREF 126:32877a,32880a
TI Preparation and specificity of antibodies to an anti-tumor . beta.-glucan, lentinan
AU Mizono, Masashi; Minato, Ken-ichiro; Tsuchida, Hironobu
CS Grad. Sch. Sci. and Tech., Kobe Univ., Kobe, 657, Japan
SO Biochemistry and Molecular Biology International (1996), 39(4), 679-685
CODEN: BMBIES; ISSN: 1039-9712
PB Academic
DT Journal
LA English

L8 ANSWER 29 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB A glucan composition is disclosed which contains a β-1,3-glucan covalently attached to a bioactive agent. The β-1,3-glucan is attached to the bioactive agent by means of a hydrolyzable covalent linkage to form a glucan/agent complex. Also disclosed are methods relating to the complex of the invention, including a method for the treatment of a pathogen capable of invading or colonizing phagocytic cells, and a method for delivering an antigen to a phagocytic cell. Purification of glucan from Euglena gracilis is described. Also described is e.g. preparation of a β-1,3-glucan conjugate with herpes simplex virus gD2 glucoprotein. The conjugate had enhanced adjuvant activity.
AN 1996:462438 HCAPLUS <<LOGINID::20090611>>
DN 125:105156
OREF 125:19439a,19442a
TI Covalently bound β -glucan conjugates with bioactive agents for targeted delivery
IN Tuse, Daniel; Mohagheghpour, Nahid; Dawson, Marcia; Hobbs, Peter; Winant, Richard

PA Sri International, USA
SO PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9614873	A2	19960523	WO 1995-US14800	19951114 <--
WO 9614873	A3	19960829		

W: CA, JP
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRAI US 1994-340831 A 19941116 <--

L8 ANSWER 30 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB In the last 25 yr chemical and pharmacol. studies have been focused on the non-cytotoxic, immunomodulating polysaccharides. Yeast and related fungal (1→3)-β-D-glucans, especially, those having appropriate O-6-β-D-glucosyl branches (db, 1/3 to 1/5) exhibited strong antitumor effects, and can be used as an immnumostimulator in cancer therapy. Such antitumor effects may be due to the triple helix of the backbone; (1→6)- β -glucan of lichen and also synthetic branched (1→4)-β-D-glucans were inactive. In addition, our extensive studies on the structure-activity relationship using various branched (1→3)-β-D-glucans (db, 1/25 - 3/4) showed that the distribution of the branches along the backbone and their mol. shapes may also play a role in expression of antitumor activity, as indicated by modification of the side chains. We will discuss interrelation of structure and antitumor effects of immunomodifying glucans, e.g, an exocellular glucan of Pestalotia sp (db, 3/5), and a highly active glucan (db. 1/4) from Volvariella volvaceas, and also antibody specificities of Volvariella glucan.
AN 1996:412276 HCAPLUS <<LOGINID::20090611>>
TI Interrelation of structure and antitumor effects of fungal (1→3) β-D-glucans.
AU Misaki, A.; Kakuta, M.; Kishida, Etsu
CS Faculty Human Life Science, Osaka City University, Sumiyoshi, 558, Japan
SO Book of Abstracts, 212th ACS National Meeting, Orlando, FL, August 25-29 (1996), CARB-042 Publisher: American Chemical Society, Washington, D. C.
CODEN: 63BFAF
DT Conference; Meeting Abstract
LA English

L8 ANSWER 31 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB Bispecific antibody (BsAb) with specificity for tumor cell surface antigen and the CD3 mol. on T cells can redirect activated T cells to lyse tumor cells. Since the ex vivo expansion and activation of T cells is impractical and ineffective for treating established tumors, the authors tested whether the immune stimulant . beta. glucan could in situ-activate T cells, which could secondarily be retargeted with BsAbs to lyse tumor cells. To test for tumor neutralization, C3H/HeN mice were injected i.v. with Cl-62 melanoma cells and immediately treated with i.p. .beta . glucan and/or anti-CD3 (500A2) + anti-p97 (96.5) F(ab')2 BsAb i.v. Pulmonary metastases were counted 14 days later. To test for tumor rejection and survival in a solid tumor model, mice were injected s.c. and i.p. with Cl-62 cells and 7 days later administered β glucan i.p. and/or F(ab')2 BsAb i.v. In the neutralization model, there was a significant reduction in the number of metastases in the β glucan + BsAb group,

as compared with controls, and with β glucan alone. In the established tumor model, β glucan + BsAb reduced the incidence of s.c. tumors as compared with control, BsAb alone, and β glucan alone. It also prolonged survival of tumor-bearing mice compared with control, BsAb alone, and β glucan alone. Thus, T cells can be activated in vivo by β glucan and retargeted with F(ab')2 BsAb.

AN 1996:160223 HCAPLUS <<LOGINID::20090611>>
DN 124:257967
OREF 124:47789a,47792a
TI Pulmonary metastases neutralization and tumor rejection by in vivo administration of β glucan and bispecific antibody
AU Penna, Christophe; Dean, Phillip A.; Nelson, Heidi
CS Department Surgery, Mayo Clinic and Mayo Foundation, Rochester, MN, 55905, USA
SO International Journal of Cancer (1996), 65(3), 377-82
CODEN: IJCNAW; ISSN: 0020-7136
PB Wiley-Liss
DT Journal
LA English

L8 ANSWER 32 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB A review with 14 listed refs. on the systematic fractionation and structural diversity of branched (1→3)- β - glucan of fukurotake, chemical modification in relation to immunomodulating mechanism of the glucans, antibodies to the glucans and their application in studies of neoplasm inhibition.

AN 1995:536205 HCAPLUS <<LOGINID::20090611>>
DN 123:141915
OREF 123:25281a,25284a
TI Straw mushroom, fukurotake, Volvariella volvacea
AU Misaki, Akira; Kishida, Etsu
CS Osaka City University, Ashiya, 659, Japan
SO Food Reviews International (1995), 11(1), 219-23
CODEN: FRINEL; ISSN: 8755-9129
DT Journal; General Review
LA English

L8 ANSWER 33 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB Lentinan, an immunopotentiating β-1,3-glucan polysaccharide stimuated the in vitro phagocytosis of BSA-coated, C3b- or monoclonal immunoglobuin (IgG2b)-coated fluorescent microspheres by resident or thioglycollate-elicited mouse macrophages in the dose-dependent manner. Anal. of flow cytometric data has shown that microbead phagocytosis of resident macrophages, which exhibit a lower basic phagocytic activity than the thioglycollate elicited ones, has been augmented by up to 900% due to lentinan. The percent ratio of phagocytes among peritoneal exudate cells, however, remained unchanged after short-term lentinan stimulation. Preincubation of the cells with lentinan resulted in increased ingestion of the microbeads. Activation of phagocytosis by lentinan is therefore due in part to the direct stimulation of the cells, however, lentinan also serves as supplementary opsonin for complement C3b-coated beads. Mannan inhibited the ingestion of C3b-coated microspheres by 75%, which was abolished in part when lentinan was also added to the cells. Mannan did not influence the phagocytosis of BSA-coated or IgG-coated beads. These data, based solely on in vitro studies, suggest a β - glucan receptor mediated activation of phagocytes by lentinan. These receptors are different from the C3b, Fc or mannose receptors. It is very likely that stimulation of phagocytic activity of macrophages by

lentinan may contribute to the antitumor action of this immunopotentiating polysaccharide.
AN 1989:630536 HCAPLUS <<LOGINID::20090611>>
DN 111:230536
OREF 111:38301a,38304a
TI Effect of lentinan and mannan on phagocytosis of fluorescent latex microbeads by mouse peritoneal macrophages: a flow cytometric study
AU Abel, Gyorgy; Szollosi, Janos; Chihara, Goro; Fachet, Jozsef
CS Inst. Pathophysiol., Univ. Med. Sch., Debrecen, Hung.
SO International Journal of Immunopharmacology (1989), 11(6), 615-21
CODEN: IJIMDS; ISSN: 0192-0561
DT Journal
LA English

L8 ANSWER 34 OF 34 HCAPLUS COPYRIGHT 2009 ACS on STN
AB The effects of the β-1,3-glucan, LELFD, obtained from liquid-cultured mycelium of G. frondosa, on the growth of syngeneic tumors and immune responses in mice were examined In Meth A fibrosarcoma or IMC carcinoma solid tumor systems, LELFD administered i.p. or intralesionally (i.l.) exhibited significant antitumor effects. However, the growth of L1210 and P388 leukemias was unaffected by the injection of LELFD. The injection of LELFD i.p. enhanced the activities of natural killer cells and macrophages in mice. LELFD also enhanced the antibody response when it was injected i.p. with sheep red blood cells into mice. Furthermore, it was found that LELFD could activate complement pathway.
AN 1989:185485 HCAPLUS <<LOGINID::20090611>>
DN 110:185485
OREF 110:30578h,30579a
TI Antitumor and immunomodulating activities of a β - glucan obtained from liquid-cultured Grifola frondosa
AU Suzuki, Iwao; Hashimoto, Koichi; Oikawa, Shozo; Sato, Kichiro; Osawa, Masumi; Yadomae, Toshiro
CS Tokyo Coll. Pharm., Hachioji, 192-03, Japan
SO Chemical & Pharmaceutical Bulletin (1989), 37(2), 410-13
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English